



**MAISON  
DES  
KINES**  
INK FORMATION

Institut National de la Kinésithérapie  
[www.maisondeskines.com](http://www.maisondeskines.com)

> 3, rue Lespagnol - 75020 Paris  
tél. : 01 44 83 46 71

[secretariat@ink-formation.com](mailto:secretariat@ink-formation.com)

N° de déclaration d'activité : 11 75 116 30 75



## GENOU LIGAMENTAIRE et KINESITHERAPIE :

### A – Programme détaillé

#### DUREE

Six jours en présentiel :  
- 42 heures de formation

#### NOMBRE DE STAGIAIRES

- Minimum : 14 (sauf cas exceptionnels)  
- Maximum : 20

#### FORMATEURS

- Dr Pierre CHAMBAT, Chirurgien du Genou, co-fondateur du Centre Orthopédique Santy à Lyon
- Damien DRICOT, Kinésithérapeute, expert en rééducation du genou
- Grégory VIGNE, Docteur en Sciences du Sport, expert en réathlétisation
- Yann FOURNIER, Médecin du sport au centre orthopédique Santy, médecin de l'OL
- Francois GABRIEL, kinésithérapeute libéral et enseignant IFMK/Lyon 1/DU kiné du sport
- Meven LEGUEN, master en réathlétisation

#### 1) OBJECTIFS

La chirurgie réparatrice du ligament croisé antérieur représente 40 000 interventions par an. La rééducation et la réadaptation sportive suite à cet acte est longue et parfois complexe. Aujourd'hui il est important de faire évoluer notre pratique et ce pour deux raisons.

La première : les protocoles de rééducation actuels, basés sur des données temporelles, ne permettent pas l'adaptation et la quantification de l'évolution propre de chaque patient. En utilisant des données fonctionnelles, nous allons pouvoir restructurer le protocole et répondre à ces deux problématiques.

La deuxième : selon les études, 15 à 20% des plasties du LCA auront une chirurgie dans les 5 ans.

Quelles en sont les raisons ? Pouvons-nous agir pour tenter de diminuer ces statistiques ?

Le premier module va permettre aux kinésithérapeutes de faire évoluer leurs pratiques en répondant à ces questions. La visée de ce stage est de permettre une remise à jour complète des savoirs et savoir-faire afin de les rendre conformes aux connaissances actuelles de la biomécanique à la physiopathologie, du bilan au traitement en passant par des travaux pratiques.

La gestion postopératoire reste une étape charnière dans la qualité du résultat des plasties du LCA. Elle s'étend sur une période de 6 mois depuis la convalescence postopératoire immédiate jusqu'à la reprise l'activité sportive.

La question du retour au sport reste la préoccupation principale des athlètes opérés d'une rupture du LCA et la nécessité d'optimiser les délais de reprise reste omniprésente. A ce jour, la reprise du sport est basée sur des critères d'évolution clinique et de délais depuis la chirurgie.



DEVIENT





**MAISON  
DES  
KINES**  
INK FORMATION

Institut National de la Kinésithérapie  
[www.maisondeskines.com](http://www.maisondeskines.com)

> 3, rue Lespagnol - 75020 Paris  
tél. : 01 44 83 46 71  
[secretariat@ink-formation.com](mailto:secretariat@ink-formation.com)  
N° de déclaration d'activité : 11 75 116 30 75



Le retour au sport repose bien entendu sur un examen clinique précis et une évaluation laximétrique. Néanmoins, il est désormais nécessaire de s'appuyer sur d'autres critères indispensables à la restauration d'un genou stable et sûr.

Une mesure de force à l'aide d'un bilan iso cinétique permet de détecter un déficit entre le membre opéré et le membre sain et/ou un déséquilibre entre le quadriceps et les ischio-jambiers.

Il convient désormais d'ajouter une évaluation du contrôle neuromusculaire au bilan final des patients opérés pour s'assurer du bon développement des qualités physiques requises et valider la possibilité de retour au sport.

La prise en charge globale du genou post chirurgie se doit d'aborder le syndrome douloureux rotulien (ou syndrome fémoro-patellaire).

En effet, le SDR - responsable à lui seul de plus de 25% de la pathologie du genou du sportif – peut avoir une origine secondaire associée à des complications liées à une ligamentoplastie du ligament croisé antérieur. Il paraît donc indispensable – dans ce contexte - de savoir gérer les complications liées au SDR.

### Contenu :

Théorique, conceptuel, technologique et pratique (Voir infra)

### Objectifs généraux :

Le participant sera capable après une analyse de la pratique actuelle et des recommandations de :

- Analyser et évaluer un patient, sa situation et élaborer un diagnostic kinésithérapique
- Concevoir et conduire un projet thérapeutique kinésithérapique, adapté au patient et à sa situation (incluant la dimension éducative)
- Concevoir, mettre en œuvre et évaluer la prise en charge kinésithérapique

### Objectifs spécifiques :

A l'issue de la formation, les kinésithérapeutes stagiaires auront acquis des savoirs et des savoir-faire processuels et techniques, **ils sauront** :

- Avoir une vision globale de la prise en charge du genou post chirurgie reconstructrice du LCA
- Utiliser des savoirs anatomiques et biomécaniques, utiles à la prise en charge
- Utiliser des savoirs physiologiques et physiopathologiques
- Elaborer un bilan-diagnostic kinésithérapique, un raisonnement clinique et un programme de soins avec des techniques adaptées aux spécificités des lésions et des traitements
- Assurer un suivi du patient en coordination avec les autres acteurs de santé
- Construire et mettre en œuvre une rééducation adaptée en fonction du type de lésion et des particularités du patient
- Mettre en œuvre un protocole de rééducation en se basant sur des niveaux de récupération motrice plutôt que sur des données temporelles
- Valider le passage de la réhabilitation sportive à la réathlétisation.
- Effectuer une évaluation continue de sa pratique professionnelle et de l'évolution de l'état de santé du patient
- Maîtriser la méthode de prise en charge du sportif jusqu'à la réathlétisation
- Savoir prévenir les syndromes douloureux rotuliens post-opératoires

Par ailleurs, A l'issue de la formation, les stagiaires **maitriseront** :

- Concernant le développement de qualités physiques
  - o Une vision précise de la stratégie de planification d'une réathlétisation
  - o L'ensemble des outils nécessaires à la réalisation des séances dans toutes leurs composantes
    - o Le contenu d'un module de 12 séances de réathlétisation, pour les pratiquants d'activités physiques, et sportifs amateurs et avec un focus rapide sur les apports supplémentaires pour des sportifs de haut niveau.



DEVIENT



- Concernant une méthodologie d'évaluation
  - o La méthodologie pratique de passation du test « K-STARTS ».
  - o La méthodologie pour rédiger un rapport synthétique du test (pour transmission aux médecins et chirurgiens suiveurs)
  - o Les bases pour définir les objectifs précis de la réathlétisation
- Concernant le syndrome douloureux rotulien
  - o La reconnaissance des signes fonctionnels pouvant orienter sur un SDR
  - o Les bases de la prise en charge en rééducation
  - o Les bases pour orienter les objectifs de réathlétisation

## 2) RESUME

### SEMINAIRE 1

#### De la chirurgie à la réhabilitation pour l'activité physique ou sportive

#### Premier jour : 9h00-12h30 & 13h30-17h00

##### Jour 1

###### Matin :

Contenus :

9h00-9h30

- Restitution des grilles « Pré-formation » (pré-test) et tour de table

9h30-11h30

- Constats et origines de la méthodologie
- Anatomie et physiopathologie du genou
- Rappels anatomiques, physiologiques et biomécaniques

11h30-12h30

- Choix et intérêts de la plastie lors d'une ligamentoplastie du LCA

###### Après-midi :

Contenus :

13h30-15h30

- Les attentes à 6 mois post opératoire :
- L'évaluation analytique : l'isocinétisme

15h30-17h00

- L'évaluation fonctionnelle : le K-STARTS
- Evaluation de la fin de la réhabilitation sportive : le TAR (Test d'Aptitude à la Réathlétisation)

#### Deuxième jour : 9h00-12h30 & 13h30-17h00

##### Jour 2

###### Matin :

Contenus :

9h00-11h00

- Comment faire évoluer les protocoles de prise en charge post-opératoire du genou après LCA

- Les niveaux de récupération motrices et tests associés

11h00-12h30

- Les facteurs de risques de reprise chirurgicale
- Analyse vidéo des stratégies motrices : Exemples et méthodologie.
- Analyse vidéo des stratégies motrices : mise en pratique.

### Après-midi :

Contenus :

13h30-15h30

- La phase inflammatoire : comment la faire évoluer ? Mise en pratique.
- Le retour à la marche : comment le faire évoluer ? Mise en pratique.

15h30-17h00

- Le renforcement musculaire : comment le faire évoluer ? Mise en pratique.
- La réadaptation de l'activité physique ou sportive : comment la faire évoluer ? Mise en pratique.

## SEMINAIRE 2

### Les grands principes de la réathlétisation

**Journée : 9h00-12h30 & 13h30-17h00**

- Les différentes phases de La réathlétisation
- Détermination des objectifs individuels
- Acquisition de la « boîte à outils » d'exercices de réathlétisation
- Exercices de proprioception
- Exercices de coordination
- Exercices de force
- Cas concrets : mise en place de séances de force max.

NB : les participants à la formation observeront des séances individuelles et collectives réalisées au sein du centre ATHLETIC. Ils seront mis en situation lors d'exercices pratiques.

## SEMINAIRE 3

### Développement des qualités physiques, évaluation et cas particulier du syndrome douloureux rotulien

**Premier jour : 9h00-12h30 & 13h30-17h00**

Contenus :

Développement des qualités physiques en réathlétisation

- La méthodologie concrète sur 3 niveaux
  - o Proprioception
  - o Coordination
  - o Force
- Exercices de mise en pratique
  - o Explication du contexte
  - o Mises en situation
  - o De briefing de séance
- Planification type
  - o Planification chez le sportif amateur : protocole de 12 séances
  - o Adaptations chez le sportif de haut niveau : protocole de 12 séances et plus

**Deuxième jour : 9h00-12h30 & 13h30-17h00**

Contenus :

SDR et réathlétisation

- Présentation de la physiopathologie du syndrome douloureux rotulien :
  - o Démarche diagnostic
  - o Principes thérapeutiques
- Prise en charge en rééducation :
  - o En rééducation classique
  - o En iso cinétisme
- Prise en charge en réathlétisation
  - o Théorie
  - o Planification
- Mise en pratique des exercices



**MAISON  
DES  
KINES**  
INK FORMATION

Institut National de la Kinésithérapie  
[www.maisondeskines.com](http://www.maisondeskines.com)

> 3, rue Lespagnol - 75020 Paris  
tél. : 01 44 83 46 71

[secretariat@ink-formation.com](mailto:secretariat@ink-formation.com)

N° de déclaration d'activité : 11 75 116 30 75



Troisième jour : 9h00-12h30 & 13h30-17h00

Contenus : K-STARTS

- Présentation du test :
  - o Revue de la littérature scientifique
  - o Méthodologie du test K-STARTS (test à 6 mois post op)
- Observations et mise en pratique
  - o Observation de tests
  - o Mise en pratique individuelle
- Interprétations des résultats
  - o Présentation des résultats
  - o Mise en relation entre les résultats bruts et les recommandations de réathlétisation

### 3) METHODOLOGIES

- Analyse des pratiques par grille d'évaluation « pré formation » (**pré-test**)
- Restitution au formateur des résultats de ces grilles d'analyse des pratiques préformation, question par question au groupe et à chaque stagiaire
- Partie présente d'une durée de 42 h comportant des échanges sur les résultats de l'évaluation pré-formation (**pré-test**), d'un face à face pédagogique de d'enseignement cognitif, selon les méthodes pédagogiques décrites ci-dessous, principalement centré sur les problèmes ou lacunes révélés par les évaluations.
- Analyse des pratiques par évaluation post formation
- Restitution individuelle au stagiaire de l'impact de la formation sur la pratique professionnelle
- Restitution statistique, au formateur, de l'impact de sa formation sur la pratique

### **B – Méthodes pédagogiques mises en œuvre**

Les différentes méthodes pédagogiques sont employées en alternance, au fur et à mesure du déroulement de la formation :

- **Méthode participative - interrogative** : les stagiaires échangent sur leurs pratiques professionnelles, à partir de cas cliniques et des résultats des grilles pré-formation (pré-test)
- **Méthode expérientielle** : modèle pédagogique centré sur l'apprenant et qui consiste, après avoir fait tomber ses croyances, à l'aider à reconstruire de nouvelles connaissances
- **Méthode expositive** : le formateur donne son cours théorique, lors de la partie cognitive
- **Méthode démonstrative** : le formateur fait une démonstration pratique, sur un stagiaire ou un modèle anatomique, devant les participants lors des TP
- **Méthode active** : les stagiaires reproduisent les gestes techniques, entre eux, par binôme.

Afin d'optimiser la mise en œuvre de ces méthodes, les supports et matériels mis à disposition sont :

- Projection PPT du cours, photocopié et / ou clé USB reprenant le PPT
- Si besoin et en fonction du thème de la formation : tables de pratiques (1 pour 2), tapis, coussins, modèles anatomiques, consommables (bandages, élastiques, etc...).

### **C – Méthodes d'évaluation de l'action proposée**

- Evaluation « pré » (pré-test) et « post formation » (post-test)
- Questionnaire de satisfaction immédiate
- Questionnaire de satisfaction à distance



DEVIENT





**MAISON  
DES  
KINES**  
INK FORMATION

Institut National de la Kinésithérapie  
[www.maisondeskines.com](http://www.maisondeskines.com)

> 3, rue Lespagnol - 75020 Paris  
tél. : 01 44 83 46 71

[secretariat@ink-formation.com](mailto:secretariat@ink-formation.com)

N° de déclaration d'activité : 11 75 116 30 75



## D – Référence recommandation bibliographie

- Adern C. et al., Prevention, diagnosis and management of paediatric ACL injuries, BJSM, 2018
- Al Attar, W. S. A., Soomro, N., Pappas, E., Sinclair, P. J., & Sanders, R. H. (2016). How effective are injury prevention programs for soccer players? A systematic review and meta-analysis. *Sports medicine*, 46(2), 205-217.
- Almangoush A, Herrington L. Functional Performance Testing and Patient Reported Outcomes following ACL Reconstruction: A Systematic Scoping Review. *Int Sch Res Not*. 2014;2014:1-14.
- Almangoush A. et al, Functional performance testing and patient reported outcomes following ACL reconstruction : a systematic scoping review, ???, 2014
- Ardern CL, Glasgow P, Schneiders A, et al. 2016 Consensus statement on return to sport from the First World Congress in Sports Physical Therapy, Bern. *Br J Sports Med*. 2016;50(14):853-864.
- Ardern CL, Österberg A, Tagesson S, Gauffin H, Webster KE, Kvist J. The impact of psychological readiness to return to sport and recreational activities after anterior cruciate ligament reconstruction. *Br J Sports Med*. 2014;48(22):1613-1619.
- Ardern CL, Taylor NF, Feller JA, Webster KE. Fifty-five per cent return to competitive sport following anterior cruciate ligament reconstruction surgery: an updated systematic review and metaanalysis including aspects of physical functioning and contextual factors. *Br J Sports Med*. 2014;48(21):1543-1552.
- Ardern CL, Taylor NF, Feller JA, Webster KE. Return-to-Sport Outcomes at 2 to 7 Years After Anterior Cruciate Ligament Reconstruction Surgery. *Am J Sports Med*. 2012;40(1):41-48.
- Ardern CL. Anterior Cruciate Ligament Reconstruction—Not Exactly a One-Way Ticket Back to the Preinjury Level. *Sport Heal A Multidiscip Approach*. 2015;7(3):224-230.
- Ardern, C. L., Taylor, N. F., Feller, J. A., & Webster, K. E. (2012). Return-to-sport outcomes at 2 to 7 years after anterior cruciate ligament reconstruction surgery. *The American journal of sports medicine*, 40(1), 41-48.
- Ardern, C. L., Taylor, N. F., Feller, J. A., & Webster, K. E. (2014). Fifty-five per cent return to competitive sport following anterior cruciate ligament reconstruction surgery: an updated systematic review and meta-analysis including aspects of physical functioning and contextual factors. *Br J Sports Med*, 48(21), 1543-1552.
- Ardern, C. L., Webster, K. E., Taylor, N. F., & Feller, J. A. (2011). Return to the preinjury level of competitive sport after anterior cruciate ligament reconstruction surgery: two-thirds of patients have not returned by 12 months after surgery. *The American journal of sports medicine*, 39(3), 538-543.
- Arendt, E. A., Agel, J., & Dick, R. (1999). Anterior cruciate ligament injury patterns among collegiate men and women. *Journal of athletic training*, 34(2), 86.
- Arundale A. et al., Two year ACL reinjury rate of 2,5% : outcomes report of the men in a secondary ACL injury prevention (ACL-sports), IJSPT, 2018
- Arundale A., et al., Report of the clinical and functional primary outcomes in men of the ACLSports trial : similar outcomes in men receiving secondary prevention with and without perturbation training 1 and 2 years after ACL reconstruction, *Clin Orthop Relat Res*, 2017
- Baker V, Bennell K, Stillman B, Cowan S, Crossley K. Abnormal knee joint position sense in individuals with patellofemoral pain syndrome. *J Orthop Res*. 2002 Mar;20(2):208-14.
- Bampouras TM, A comparison of bilateral muscular imbalance ratio calculations using functional tests, *JSCR*, 2017
- Barber-Westin S. et al., Factors used to determine return to unrestricted sports activities after anterior cruciate ligament reconstruction, *The journal of arthroscopic and Related Surgery*, 2011
- Barber-Westin SD, Noyes FR. Factors Used to Determine Return to Unrestricted Sports Activities After Anterior Cruciate Ligament Reconstruction. *Arthrosc J Arthrosc Relat Surg*. 2011;27(12):1697-1705.
- Barcellona G et al., The effect of knee extensor open kinectic chain resistance training in the ACL-injured knee, *Knee Surg. Sports Traumatol. Arthrosc.*, 2014
- Barford K. et al., Strenght testing following anterior ligament reconstruction. A prospective cohort study, *JSCR*, 2018



DEVIENT



- Bates N. et al., Characteristics of inpatient anterior cruciate ligament reconstructions and concomitant injuries, *Knee Surg Sports Traumatol Arthrosc*, 2016
- Beynon BD, Fleming BC, Johnson RJ. Anterior cruciate ligament strain behaviour during rehabilitation exercises in vivo. *Am J Sport Med* 1995;23:24-34.
- Beynon, B. D., Johnson, R. J., Abate, J. A., Fleming, B. C., & Nichols, C. E. (2005). Treatment of anterior cruciate ligament injuries, part I. *The American journal of sports medicine*, 33(10), 1579-1602.
- Bieler T. et al., The effects on high-intensity versus low-intensity resistance training on leg extensor power and recovery of knee function after ACL-reconstruction, *BioMed Research International*, 2014
- Blakeney W. et al., Validation of a composite test for assessment of readiness for return to sports after anterior cruciate ligament reconstruction : the K-STARTS test, *Sports Health*, 2018
- Bloomer BA, Durall CJ. Does the Addition of Hip Strengthening to a Knee-Focused Exercise Program Improve Outcomes in Patients With Patellofemoral Pain Syndrome? *J Sport Rehabil*. 2015 Nov;24(4):428-33.
- Boden, B. P., Dean, G. S., Feagin, J. A., & Garrett, W. E. (2000). Mechanisms of anterior cruciate ligament injury. *Orthopedics*, 23(6), 573-578.
- Boden, B. P., Torg, J. S., Knowles, S. B., & Hewett, T. E. (2009). Video analysis of anterior cruciate ligament injury: abnormalities in hip and ankle kinematics. *The American journal of sports medicine*, 37(2), 252-259.
- Bohu Y. et al., Translation, cross-cultural adaptation and validation of the french versions of the anterior cruciate ligament-return to sport after injury (ACL-RSI) scale, *Knee Surg. Sports Traumatol. Arthrosc.*, 2014
- Bollen SR, Scott BW. Rupture of the anterior cruciate ligament — a quiet epidemic? *Injury*. 1996;27(6):407-409.
- Bompa TO. *Périodisation de l'entraînement*. Ed Vigot. 2007.
- Bousquet B. et al., Post-operative criterion based rehabilitation of ACL repairs: a clinical commentary, *IJSPT*, 2018
- Brukner P, Khan K. *Clinical sports medicine*. 3rd ed. London: McGraw-Hill Companies, Inc; 2010.
- Callaghan MJ, Oldham JA. Quadriceps atrophy: to what extent does it exist in patellofemoral pain syndrome? *Br J Sports Med*. 2004 Jun;38(3):295-9.
- Cascio, B. M., Culp, L., & Cosgarea, A. J. (2004). Return to play after anterior cruciate ligament reconstruction. *Clinics in sports medicine*, 23(3), 395-408.
- Cheecharern S., Return to sport and knee functional scores after anterior cruciate ligament reconstruction: 2 to 10 year's follow-up, *APJSMART*, 2018
- Chen HY, Chien CC, Wu SK, Liao JJ, Jan MH. Electromechanical delay of the vastus medialis obliquus and vastus lateralis in individuals with patellofemoral pain syndrome. *J Orthop Sports Phys Ther*. 2012 Sep;42(9):791-6.
- Claes S et al. *J Anat*. Oct 2013
- Cometti G. *La pliométrie : méthodes, entraînements et exercices*. Ed Chiron.
- Cowan SM, Bennell KL, Hodges PW, Crossley KM, McConnell J. Delayed onset of electromyographic activity of vastus medialis obliquus relative to vastus lateralis in subjects with patellofemoral pain syndrome. *Arch Phys Med Rehabil*. 2001 Feb;82(2):183-9.
- Croisier JL. Et al., Strength imbalances and prevention of hamstring injury in professional soccer players, *AJSM*, 2008
- Culvenor AG, Collins NJ, Vicenzino B, Cook JL, Whitehead TS, Morris HG, Crossley KM. Predictors and effects of patellofemoral pain following hamstring-tendon ACL reconstruction. *J Sci Med Sport* 2016; 19(7):518-523.
- Czuppon S, Racette BA, Klein SE, Harris-Hayes M. Variables associated with return to sport following anterior cruciate ligament reconstruction: a systematic review. *Br J Sports Med*. 2014;48(5):356-364.
- Dempsey, A. R., Lloyd, D. G., Elliott, B. C., Steele, J. R., & Munro, B. J. (2009). Changing sidestep cutting technique reduces knee valgus loading. *The American Journal of Sports Medicine*, 37(11), 2194-2200.
- Dodds AL et al. *Bone Joint J*. March 2014
- Dvir Z. Clinical applicability of isokinetics: A review. *Clin Biomech (Bristol, Avon)*. 1991 Aug;6(3):133-44.
- Dyon N. *Musculation et renforcement musculaire du sportif*. Ed Amphora sports.



**MAISON  
DES  
KINES**  
INK FORMATION

Institut National de la Kinésithérapie  
[www.maisondeskines.com](http://www.maisondeskines.com)

> 3, rue Lespagnol - 75020 Paris  
tél. : 01 44 83 46 71

[secretariat@ink-formation.com](mailto:secretariat@ink-formation.com)

N° de déclaration d'activité : 11 75 116 30 75



- Ebert JR., et al., Strength and functional symmetry in associated with post-operative rehabilitation in patients following anterior cruciate ligament reconstruction, *Knee Surg Sports Traumatol Arthrosc*, 2017
- Eitzen I. et al., Quantifying quadriceps muscle strength in patients with ACL injury, focal cartilage lesions, and degenerative meniscus tears, *OJSM*, 2016
- Ekas G. et al., New meniscal tears after ACL injury : what is the risk? A systematic review protocol, *BJSM*, 2017
- Ellman M. et al., Return to play following cruciate ligament reconstruction, *J Am Acad Orthop Surg*, 2015
- Failla M, et al., Does extended preoperative rehabilitation influence outcomes 2 years after ACL reconstruction?: a comparative effectiveness study between the MOON and Delaware-OsloACL cohorts, *AM J Sports Med*, 2016
- Figved W. et al., Muscle strength measurements and functional outcome of an untreated complete distal rectus femoris muscle tear, *BMJ Case Rep*, 2014
- Ford, K. R., Myer, G. D., & Hewett, T. E. (2003). Valgus knee motion during landing in high school female and male basketball players. *Medicine & Science in Sports & Exercise*, 35(10), 1745-1750.
- Ford, K. R., Myer, G. D., & Hewett, T. E. (2011). Longitudinally Decreased Knee Abduction and Increased Hamstrings Strength in Females with Self-Reported Resistance Training: 773Board# 1 3: 15 PM-5: 15 PM. *Medicine & Science in Sports & Exercise*, 43(5), 77.
- Frank CB, Jackson DW. The science of reconstruction of the anterior cruciate ligament. *J Bone Joint Surg Am*. 1997;79(10):1556-1576.
- Gianotti SM, Marshall SW, Hume PA, Bunt L. Incidence of anterior cruciate ligament injury and other knee ligament injuries: A national population-based study. *J Sci Med Sport*. 2009;12(6):622-627.
- Giotis, D., Paschos, N. K., Zampeli, F., Pappas, E., Mitsionis, G., & Georgoulis, A. D. (2016). Bracing can partially limit tibial rotation during stressful activities after anterior cruciate ligament reconstruction with a hamstring graft. *Orthopaedics & Traumatology: Surgery & Research*, 102(5), 601-606.
- Giotis, D., Zampeli, F., Pappas, E., Mitsionis, G., Papadopoulos, P., & Georgoulis, A. D. (2013). Effects of knee bracing on tibial rotation during high loading activities in anterior cruciate ligament-reconstructed knees. *Arthroscopy: The Journal of Arthroscopic & Related Surgery*, 29(10), 1644-1652.
- Giotis, D., Zampeli, F., Pappas, E., Mitsionis, G., Papadopoulos, P., & Georgoulis, A. D. (2013). The effect of knee braces on tibial rotation in anterior cruciate ligament-deficient knees during high-demand athletic activities. *Clinical Journal of Sport Medicine*, 23(4), 287-292.
- Gokeler, A., Hof, A. L., Arnold, M. P., Dijkstra, P. U., Postema, K., & Otten, E. (2010). Abnormal landing strategies after ACL reconstruction. *Scandinavian journal of medicine & science in sports*, 20(1), e12-e19.
- Grassi A, Vascellari A, Combi A, Tomaello L, Canata GL, Zaffagnini S. Return to sport after ACL reconstruction: a survey between the Italian Society of Knee, Arthroscopy, Sport, Cartilage and Orthopaedic Technologies (SIGASCOT) members. *Eur J Orthop Surg Traumatol*. 2016;26(5):509-516.
- Grassi A. et al., After revision anterior cruciate ligament reconstruction, who returns to sport? A systematic review and meta-analysis, *BJSM*, 2015
- Grindem H, Snyder-Mackler L, Moksnes H, Engebretsen L, Risberg MA. Simple decision rules can reduce reinjury risk by 84% after ACL reconstruction: the Delaware-Oslo ACL cohort study. *Br J Sports Med*. 2016;50(13):804-808.
- Grindem H. et al., Alarming underutilization of rehabilitation in athletes with anterior cruciate ligament reconstruction : four ways to change the game, *Br J Sports Med*, 2018
- Grindem H. et al., How does a combined pre-operative and post-operative rehabilitation program influence the outcome of ACL reconstruction 2 years after surgery? A comparison between patients in the Delaware-Oslo ACL cohort and the Norwegian knee ligament registry, *Br J Sports Med*, 2015
- Grindem H. et al., Nonsurgical or surgical treatment of ACL injuries : knee function, sports participation, and knee reinjury, *J Bone Joint Surg AM*, 2014
- Grindem H. et al., Simple decision rules reduce reinjury risk after anterior cruciate ligament reconstruction : the Delaware-Oslo ACL cohort study, *Br J Sports Med*, 2016
- Grindem H. et al ; Anterior Cruciate Ligament Injury—Who Succeeds Without Reconstructive Surgery, *The Orthopaedic Journal of Sports Medicine*, 2018



DEVIENT





- Guney H, Yuksel I, Kaya D, Doral MN. The relationship between quadriceps strength and joint position sense, functional outcome and painful activities in patellofemoral pain syndrome. *Knee Surg Sports Traumatol Arthrosc.* 2016 Sep;24(9):2966-72.
- Gustavsson A, Neeter C, Thomeé P, et al. A test battery for evaluating hop performance in patients with an ACL injury and patients who have undergone ACL reconstruction. *Knee Surgery, Sport Traumatol Arthrosc.* 2006;14(8):778-788.
- Hachana Y, Chaabène H, Ben Rajeb G, et al. Validity and Reliability of New Agility Test among Elite and Subelite under 14-Soccer Players. Kapoula Z, ed. *PLoS One.* 2014;9(4):e95773.
- Harput G. Self-reported outcomes are associated with knee strength and functional symmetry in individuals who have undergone anterior cruciate ligament reconstruction with hamstring tendon autograft, *The Knee*, 2018
- Harris JD, Abrams GD, Bach BR, et al. Return to Sport After ACL Reconstruction. *Orthopedics.* 2014;37(2):e103-e108.
- Hartigan EH, Axe MJ, Snyder-Mackler L. Time Line for Noncopers to Pass Return-to-Sports Criteria After Anterior Cruciate Ligament Reconstruction. *J Orthop Sport Phys Ther.* 2010;40(3):141-154.
- Heinert B. et Al ; Influence of anterior cruciate ligament reconstruction on dynamic postural control, *The International Journal of Sports Physical Therapy*, 2018
- Helito CP et al. *Orthop J Sports Med.* Dec 2013
- Herbst E, Hoser C, Hildebrandt C, et al. Functional assessments for decision-making regarding return to sports following ACL reconstruction. Part II: clinical application of a new test battery. *Knee Surgery, Sport Traumatol Arthrosc.* 2015;23(5):1283-1291.
- Herrington L, Myer G, Horsley I. Task based rehabilitation protocol for elite athletes following Anterior Cruciate ligament reconstruction: a clinical commentary. *Phys Ther Sport.* 2013;14(4):188-198.
- Herrington L. et Al ; Quadriceps strength and functional performance after anterior cruciate ligament reconstruction in professional soccer players at time of return to sport, *Journal of Strength and Conditioning Research*, 2018
- Herrington L. et al., Task based rehabilitation protocol athletes following anterior cruciate ligament reconstruction : a clinical commentary, *Physical Therapy in Sport*, 2013
- Herrington L. Knee valgus angle during single leg squat and landing in patellofemoral pain patients and controls. *Knee.* 2014;21(2):514-517.
- Hewett TE, Myer GD, Ford KR, et al. Biomechanical Measures of Neuromuscular Control and Valgus Loading of the Knee Predict Anterior Cruciate Ligament Injury Risk in Female Athletes: A Prospective Study. *Am J Sports Med.* 2005;33(4):492-501.
- Hewett, T. E., & Myer, G. D. (2011). The mechanistic connection between the trunk, knee, and anterior cruciate ligament injury. *Exercise and sport sciences reviews*, 39(4), 161.
- Hewett, T. E., Ford, K. R., & Myer, G. D. (2006). Anterior cruciate ligament injuries in female athletes: Part 2, a meta-analysis of neuromuscular interventions aimed at injury prevention. *The American journal of sports medicine*, 34(3), 490-498.
- Hewett, T. E., Ford, K. R., Hoogenboom, B. J., & Myer, G. D. (2010). Understanding and preventing acl injuries: current biomechanical and epidemiologic considerations-update 2010. *North American journal of sports physical therapy: NAJSPT*, 5(4), 234.
- Hewett, T. E., Ford, K. R., Myer, G. D., Wanstrath, K., & Scheper, M. (2006). Gender differences in hip adduction motion and torque during a single-leg agility maneuver. *Journal of Orthopaedic Research*, 24(3), 416-421.
- Hewett, T. E., Lindenfeld, T. N., Riccobene, J. V., & Noyes, F. R. (1999). The effect of neuromuscular training on the incidence of knee injury in female athletes. *The American journal of sports medicine*, 27(6), 699-706.
- Hewett, T. E., Myer, G. D., & Ford, K. R. (2004). Decrease in neuromuscular control about the knee with maturation in female athletes. *JBJS*, 86(8), 1601-1608.
- Hewett, T. E., Myer, G. D., & Ford, K. R. (2006). Anterior cruciate ligament injuries in female athletes: Part 1, mechanisms and risk factors. *The American journal of sports medicine*, 34(2), 299-311.
- Hewett, T. E., Myer, G. D., Ford, K. R., & Slauterbeck, J. R. (2006). Preparticipation physical examination using a box drop vertical jump test in young athletes: the effects of puberty and sex. *Clinical Journal of Sport Medicine*, 16(4), 298-304.
- Hewett, T. E., Myer, G. D., Ford, K. R., Heidt Jr, R. S., Colosimo, A. J., McLean, S. G., ... & Succop, P. (2005). Biomechanical measures of neuromuscular control and valgus loading of

the knee predict anterior cruciate ligament injury risk in female athletes: a prospective study. *The American journal of sports medicine*, 33(4), 492-501.

- Hewett, T. E., Stroupe, A. L., Nance, T. A., & Noyes, F. R. (1996). Plyometric training in female athletes: decreased impact forces and increased hamstring torques. *The American journal of sports medicine*, 24(6), 765-773.
- Hewett, T. E., Torg, J. S., & Boden, B. P. (2009). Video analysis of trunk and knee motion during non-contact anterior cruciate ligament injury in female athletes: lateral trunk and knee abduction motion are combined components of the injury mechanism. *British journal of sports medicine*, 43(6), 417-422.
- Hewett, T. E., Zazulak, B. T., & Myer, G. D. (2007). Effects of the menstrual cycle on anterior cruciate ligament injury risk: a systematic review. *The American journal of sports medicine*, 35(4), 659-668.
- Hildebrandt C, Müller L, Zisch B, Huber R, Fink C, Raschner C. Functional assessments for decision - making regarding return to sports following ACL reconstruction . Part I : development of a new test battery. *Knee Surgery, Sport Traumatol Arthrosc.* 2015;1273-1281.
- Irrgang JJ, Ho H, Harner CD, Fu FH. Use of the International Knee Documentation Committee guidelines to assess outcome following anterior cruciate ligament reconstruction. *Knee Surgery, Sport Traumatol Arthrosc.* 1998;6(2):107-114.
- Ismail, S. A., Button, K., Simic, M., Van Deursen, R., & Pappas, E. (2016). Three-dimensional kinematic and kinetic gait deviations in individuals with chronic anterior cruciate ligament deficient knee: A systematic review and meta-analysis. *Clinical Biomechanics*, 35, 68-80.
- Itoh H, Kurosaka M, Yoshiya S, Ichihashi N, Mizuno K. Evaluation of functional deficits determined by four different hop tests in patients with anterior cruciate ligament deficiency. *Knee Surgery, Sport Traumatol Arthrosc.* 1998;6(4):241-245.
- Janssen R. et Al ; ACL reconstruction with hamstring tendon autograft and accelerated brace-free rehabilitation: a systematic review of clinical outcomes, *BJM Open Sport et Exercice Medicine*, 2018
- Janssen, K. W., Orchard, J. W., Driscoll, T. R., & Van Mechelen, W. (2012). High incidence and costs for anterior cruciate ligament reconstructions performed in Australia from 2003–2004 to 2007–2008: time for an anterior cruciate ligament register by Scandinavian model?. *Scandinavian journal of medicine & science in sports*, 22(4), 495-501.
- Kamath G V, Murphy T, Creighton RA, Viradia N, Taft TN, Spang JT. Anterior Cruciate Ligament Injury, Return to Play, and Reinjury in the Elite Collegiate Athlete. *Am J Sports Med.* 2014;42(7):1638-1643.
- Kaya D, Citaker S, Kerimoglu U, Atay OA, Nyland J, Callaghan M, Yakut Y, Yüksel I, Doral MN. Women with patellofemoral pain syndrome have quadriceps femoris volume and strength deficiency. *Knee Surg Sports Traumatol Arthrosc.* 2011 Feb;19(2):242-7.
- Koutras, G., Bernard, M., Terzidis, I. P., Papadopoulos, P., Georgoulis, A., & Pappas, E. (2016). Comparison of knee flexion isokinetic deficits between seated and prone positions after ACL reconstruction with hamstrings graft: Implications for rehabilitation and return to sports decisions. *Journal of science and medicine in sport*, 19(7), 559-562.
- Koutras, G., Letsi, M., Papadopoulos, P., Gigis, I., & Pappas, E. (2012). A randomized trial of isokinetic versus isotonic rehabilitation program after arthroscopic meniscectomy. *International journal of sports physical therapy*, 7(1), 31.
- Koutras, G., Papadopoulos, P., Terzidis, I. P., Gigis, I., & Pappas, E. (2013). Short-term functional and clinical outcomes after ACL reconstruction with hamstrings autograft: transtibial versus anteromedial portal technique. *Knee Surgery, Sports Traumatology, Arthroscopy*, 21(8), 1904-1909.
- Krosshaug, T., Nakamae, A., Boden, B., Engebretsen, L., Smith, G., Slauterbeck, J., ... & Bahr, R. (2007). Estimating 3D joint kinematics from video sequences of running and cutting maneuvers—assessing the accuracy of simple visual inspection. *Gait & posture*, 26(3), 378-385.
- Kvist, J. (2004). Rehabilitation following anterior cruciate ligament injury. *Sports Medicine*, 34(4), 269-280.
- Kvist, J., Vasiliadis, H. S., & Georgoulis, A. D. (2011). The influence of graft choice on isokinetic muscle strength 4–24 months after anterior cruciate ligament reconstruction. *Knee Surgery, Sports Traumatology, Arthroscopy*, 19(5), 768-780.
- Kyritsis P, Bahr R, Landreau P, Miladi R, Witvrouw E. Likelihood of ACL graft rupture: not meeting six clinical discharge criteria before return to sport is associated with a four times greater risk of rupture. *Br J Sports Med.* 2016;50(15):946-951.

- Laboute E, Savalli L, Puig P, et al. Analysis of return to competition and repeat rupture for 298 anterior cruciate ligament reconstructions with patellar or hamstring tendon autograft in sportspeople. *Ann Phys Rehabil Med.* 2010;53(10):598-614.
- Langford JL, Webster KE, Feller JA. A prospective longitudinal study to assess psychological changes following anterior cruciate ligament reconstruction surgery. *Br J Sports Med.* 2009;43(5):377-378.
- Lee D. et Al ; Single-leg vertical jump test as a functional test after anterior cruciate ligament reconstruction, *The Knee*, 2018
- Leys T, Salmon L, Waller A, Linklater J, Pinczewski L. Clinical Results and Risk Factors for Reinjury 15 Years After Anterior Cruciate Ligament Reconstruction. *Am J Sports Med.* 2012;40(3):595-605.
- Li S, Su W, Zhao J et al. A meta-analysis of hamstring autografts versus bone-patellar tendon-bone autografts for reconstruction of the anterior cruciate ligament. *Knee* 2011; 18(5):287–293.
- Liederbach, M., Kremenec, I. J., Orishimo, K. F., Pappas, E., & Hagins, M. (2014). Comparison of landing biomechanics between male and female dancers and athletes, part 2: influence of fatigue and implications for anterior cruciate ligament injury. *The American journal of sports medicine*, 42(5), 1089-1095.
- Lind M, Menhert F, Pedersen AB. The first results from the Danish ACL reconstruction registry: epidemiologic and 2 year follow-up results from 5,818 knee ligament reconstructions. *Knee Surgery, Sport Traumatol Arthrosc.* 2009;17(2):117-124.
- Logerstedt et Al ; Self-reported Knee Function Can Identify Athletes Who Fail Return to Activity Criteria up to 1 Year after Anterior Cruciate Ligament Reconstruction. A Delaware-Oslo ACL Cohort Study, *J Orthop Sports Phys Ther*, 2014
- Lohmander, L. S., Englund, P. M., Dahl, L. L., & Roos, E. M. (2007). The long-term consequence of anterior cruciate ligament and meniscus injuries: osteoarthritis. *The American journal of sports medicine*, 35(10), 1756-1769.
- Lynch A. et Al ; Consensus criteria for defining 'successful outcome' after acl injury and reconstruction: a delaware-oslo acl cohort investigation, *Br J Sports Med*, 2015
- Lysholm J, Gillquist J, Anonymous. Evaluation of Knee Ligament Surgery Results with Special Emphasis on Use of a Scoring Scale. *Am J Sports Med.* 1982;10:150-154.
- Marx RG, Jones EC, Allen a a, et al. Reliability, validity, and responsiveness of four knee outcome scales for athletic patients. *J Bone Joint Surg Am.* 2001;83-A(10):1459-1469.
- Mascarenhas R, Tranovich M, Karpie JC, Irrgang JJ, Fu FH, Harner CD. Patellar Tendon Anterior Cruciate Ligament Reconstruction in the High-Demand Patient: Evaluation of Autograft Versus Allograft Reconstruction. *Arthrosc J Arthrosc Relat Surg.* 2010;26(9):S58-S66.
- Melick N. et Al ; Evidence-based clinical practice update: practice guidelines for anterior cruciate ligament rehabilitation based on a systematic review and multidisciplinary consensus, *BJSM* , 2016
- Melick N. et Al ; How to determine leg dominance : The agreement between self-reported and observed performance in healthy adults, *PLOS ONE*, 2017
- Menzer H. et Al ; The Utility of Objective Strength and Functional Performance to Predict Subjective Outcomes After Anterior Cruciate Ligament Reconstruction, *The Orthopaedic Journal of Sports Medicine*, 2017
- Miao P, Xu Y, Pan C, Liu H, Wang C. Vastus medialis oblique and vastus lateralis activity during a double-leg semisquat with or without hip adduction in patients with patellofemoral pain syndrome. *BMC Musculoskelet Disord.* 2015 Oct 12;16:289.
- Mihelic R, Jurdana H, Jotanovic Z, Madjarevic T, Tudor A. Long-term results of anterior cruciate ligament reconstruction: a comparison with non-operative treatment with a follow-up of 17–20 years. *Int Orthop.* 2011;35(7):1093-1097.
- Misonoo, G., Kanamori, A., Ida, H., Miyakawa, S., & Ochiai, N. (2012). Evaluation of tibial rotational stability of single-bundle vs. anatomical double-bundle anterior cruciate ligament reconstruction during a high-demand activity—a quasi-randomized trial. *The Knee*, 19(2), 87-93.
- Morgan MD, Salmon LJ, Waller A, Roe JP, Pinczewski LA. Fifteen-Year Survival of Endoscopic Anterior Cruciate Ligament Reconstruction in Patients Aged 18 Years and Younger. *Am J Sports Med.* 2016;44(2):384-392.
- Munro AG, Herrington LC. Between-Session Reliability of Four Hop Tests and the Agility TTest. *J Strength Cond Res.* 2011;25(5):1470-1477.

- Myer GD, Ford KR, Barber Foss KD, Goodman A, Ceasar A, Rauh MJ, Divine JG, Hewett TE. The incidence and potential pathomechanics of patellofemoral pain in female athletes. *Clin Biomech (Bristol, Avon)*. 2010 Aug;25(7):700-7.
- Myer, G. D., Ford, K. R., & Hewett, T. E. (2004). Rationale and clinical techniques for anterior cruciate ligament injury prevention among female athletes. *Journal of athletic training*, 39(4), 352.
- Myer, G. D., Ford, K. R., Brent, J. L., & Hewett, T. E. (2006). The effects of plyometric vs. dynamic stabilization and balance training on power, balance, and landing force in female athletes. *Journal of strength and conditioning research*, 20(2), 345.
- Myer, G. D., Ford, K. R., Foss, K. D. B., Liu, C., Nick, T. G., & Hewett, T. E. (2009). The relationship of hamstrings and quadriceps strength to anterior cruciate ligament injury in female athletes. *Clinical journal of sport medicine*, 19(1), 3-8.
- Myer, G. D., Ford, K. R., Khoury, J., Succop, P., & Hewett, T. E. (2010). Clinical correlates to laboratory measures for use in non-contact anterior cruciate ligament injury risk prediction algorithm. *Clinical Biomechanics*, 25(7), 693-699.
- Myer, G. D., Ford, K. R., Khoury, J., Succop, P., & Hewett, T. E. (2011). Biomechanics laboratory-based prediction algorithm to identify female athletes with high knee loads that increase risk of ACL injury. *British journal of sports medicine*, 45(4), 245-252.
- Myer, G. D., Ford, K. R., Khoury, J., Succop, P., & Hewett, T. E. (2010). Development and validation of a clinic-based prediction tool to identify female athletes at high risk for anterior cruciate ligament injury. *The American journal of sports medicine*, 38(10), 2025-2033.
- Myer, G. D., Ford, K. R., Paterno, M. V., Nick, T. G., & Hewett, T. E. (2008). The effects of generalized joint laxity on risk of anterior cruciate ligament injury in young female athletes. *The American journal of sports medicine*, 36(6), 1073-1080.
- Myer, G. D., Paterno, M. V., Ford, K. R., & Hewett, T. E. (2008). Neuromuscular training techniques to target deficits before return to sport after anterior cruciate ligament reconstruction. *The Journal of Strength & Conditioning Research*, 22(3), 987-1014.
- Myer, G. D., Paterno, M. V., Ford, K. R., Quatman, C. E., & Hewett, T. E. (2006). Rehabilitation after anterior cruciate ligament reconstruction: criteria-based progression through the return-to-sport phase. *Journal of Orthopaedic & Sports Physical Therapy*, 36(6), 385-402.
- Myers B. et al., Normative data for hop tests in high school and collegiate basketball and soccer players, *The International Journal of Sports Physical Therapy*, 2014
- Myklebust, G., Engebretsen, L., Brækken, I. H., Skjølberg, A., Olsen, O. E., & Bahr, R. (2003). Prevention of anterior cruciate ligament injuries in female team handball players: a prospective intervention study over three seasons. *Clinical journal of sport medicine*, 13(2), 71-78.
- Myklebust, G., Maehlum, S., Holm, I., & Bahr, R. (1998). A prospective cohort study of anterior cruciate ligament injuries in elite Norwegian team handball. *Scandinavian journal of medicine & science in sports*, 8(3), 149-153.
- Natri A, Kannus P, Järvinen M. Which factors predict the long-term outcome in chronic patellofemoral pain syndrome? A 7-yr prospective follow-up study. *Med Sci Sports Exerc*. 1998 Nov;30(11):1572-7.
- Nawasreh Z, et al., Functional performance 6 months after ACL reconstruction can predict return to participation in the same preinjury level 12 and 24 months after surgery, *Br J of Sports Medicine*, 2017
- Nawasreh Z, Logerstedt D, Cummer K, Axe MJ, Risberg MA, Snyder-Mackler L. Do Patients Failing Return-to-Activity Criteria at 6 Months After Anterior Cruciate Ligament Reconstruction Continue Demonstrating Deficits at 2 Years? *Am J Sports Med*. 2017;45(5):1037-1048.
- Niederer D. et al ; Return to play, performance and career duration after ACL rupture: a case-control study in the five biggest football nations in Europe, *Scand J Med Sci Sports*, 2018
- Noyes F. et al ; Risks of future joint arthritis and reinjury after ACL Reconstruction, *ACL Injuries in the Female Athlete*, Sport health, 2018
- Noyes FR, Barber SD, Mangine RE. Abnormal lower limb symmetry determined by function hop tests after anterior cruciate ligament rupture. *Am J Sports Med*. 1991;19(5):513-518.
- Nwachukwu BU, Voleti PB, Berkanish P, et al. Return to Play and Patient Satisfaction After ACL Reconstruction. *J Bone Jt Surg*. 2017;99(9):720-725.
- O'donoghue DH. An analysis of end results of surgical treatment of major injuries to the ligaments of the knee. *J Bone Joint Surg Am*. 1955;37-A(1):1-13
- Orishimo, K. F., Kremenich, I. J., Pappas, E., Hagins, M., & Liederbach, M. (2009). Comparison of landing biomechanics between male and female professional dancers. *The American journal of sports medicine*, 37(11), 2187-2193.

- Orishimo, K. F., Liederbach, M., Kremenic, I. J., Hagins, M., & Pappas, E. (2014). Comparison of landing biomechanics between male and female dancers and athletes, part 1: Influence of sex on risk of anterior cruciate ligament injury. *The American journal of sports medicine*, 42(5), 1082-1088.
- Pappas, E., & Carpes, F. P. (2012). Lower extremity kinematic asymmetry in male and female athletes performing jump-landing tasks. *Journal of Science and Medicine in Sport*, 15(1), 87-92.
- Pappas, E., Hagins, M., Sheikhzadeh, A., Nordin, M., & Rose, D. (2007). Biomechanical differences between unilateral and bilateral landings from a jump: gender differences. *Clinical Journal of Sport Medicine*, 17(4), 263-268.
- Pappas, E., Nightingale, E. J., Simic, M., Ford, K. R., Hewett, T. E., & Myer, G. D. (2015). Do exercises used in injury prevention programmes modify cutting task biomechanics? A systematic review with meta-analysis. *Br J Sports Med*, 49(10), 673-680.
- Pappas, E., Shiyko, M. P., Ford, K. R., Myer, G. D., & Hewett, T. E. (2016). Biomechanical deficit profiles associated with ACL injury risk in female athletes. *Medicine and science in sports and exercise*, 48(1), 107.
- Pappas, E., Zampeli, F., Xergia, S. A., & Georgoulis, A. D. (2013). Lessons learned from the last 20 years of ACL-related in vivo-biomechanics research of the knee joint. *Knee Surgery, Sports Traumatology, Arthroscopy*, 21(4), 755-766.
- Pappas, E., Zazulak, B. T., Yard, E. E., & Hewett, T. E. (2011). The epidemiology of pediatric basketball injuries presenting to US emergency departments: 2000-2006. *Sports Health*, 3(4), 331-335.
- Paterno M V., Schmitt LC, Ford KR, et al. Biomechanical Measures during Landing and Postural Stability Predict Second Anterior Cruciate Ligament Injury after Anterior Cruciate Ligament Reconstruction and Return to Sport. *Am J Sports Med*. 2010;38(10):1968-1978.
- Paterno M. et Al ; Clinical Factors That Predict a Second ACL Injury After ACL Reconstruction and Return to Sport, *The Orthopaedic Journal of Sports Medicine*, 2017
- Paterno M. et Al ; Self-Reported Fear Predicts Functional Performance and Second ACL Injury After ACL Reconstruction and Return to Sport: A Pilot Study
- Paterno, M. V., Myer, G. D., Ford, K. R., & Hewett, T. E. (2004). Neuromuscular training improves single-limb stability in young female athletes. *Journal of Orthopaedic & Sports Physical Therapy*, 34(6), 305-316.
- Paterno, M. V., Rauh, M. J., Schmitt, L. C., Ford, K. R., & Hewett, T. E. (2014). Incidence of second ACL injuries 2 years after primary ACL reconstruction and return to sport. *The American journal of sports medicine*, 42(7), 1567-1573.
- Paterno, M. V., Schmitt, L. C., Ford, K. R., Rauh, M. J., Myer, G. D., Huang, B., & Hewett, T. E. (2010). Biomechanical measures during landing and postural stability predict second anterior cruciate ligament injury after anterior cruciate ligament reconstruction and return to sport. *The American journal of sports medicine*, 38(10), 1968-1978.
- Pattyn E, Mahieu N, Selve J, Verdonk P, Steyaert A, Witvrouw E. What predicts functional outcome after treatment for patellofemoral pain? *Med Sci Sports Exerc*. 2012 Oct;44(10):1827-33.
- Perriman A. et al., The effect of open-versus closed-kinetic-chain exercises on anterior tibial laxity, strenght, and function following anterior cruciate ligament reconstruction : a systematic review and meta-analysis, *Journal of orthopardic & Sports physical therapy*, 2018
- Peters JS, Tyson NL. Proximal exercises are effective in treating patellofemoral pain syndrome: a systematic review. *Int J Sports Phys Ther*. 2013 Oct;8(5):689-700.
- Rabelo ND, Lima B, Reis AC, Bley AS, Yi LC, Fukuda TY, Costa LO, Lucareli PR. *BMC Musculoskeletal Disorders* 2014, 15:157.
- Rambaud A. et Al ; Criteria for return for running after anterior cruciate ligament reconstruction : a scoping review, *Br J Sports Me*, 2018
- Rambaud A. et Al ; Criteria for return to sport after anterior cruciate ligament reconstruction with lower reinjury risk (CR'STAL study) : protocol for a prospective observational study in France, *BJM Open*, 2017
- Risberg A. et Al ; We need to implement current evidence in early rehabilitation programs to improve long-term outcome after anterior cruciate ligament injury, *J Orthop sport thys ther*, 2016
- Ristanis, S., Stergiou, N., Patras, K., Vasiliadis, H. S., Giakas, G., & Georgoulis, A. D. (2005). Excessive tibial rotation during high-demand activities is not restored by anterior cruciate



**MAISON  
DES  
KINES**  
INK FORMATION

Institut National de la Kinésithérapie  
[www.maisondeskines.com](http://www.maisondeskines.com)

> 3, rue Lespagnol - 75020 Paris  
tél. : 01 44 83 46 71

[secretariat@ink-formation.com](mailto:secretariat@ink-formation.com)

N° de déclaration d'activité : 11 75 116 30 75



ligament reconstruction. *Arthroscopy: The Journal of Arthroscopic & Related Surgery*, 21(11), 1323-1329.

- Rosso F. et al ; Factors Affecting Subjective and Objective Outcomes and Return to Play in Anterior Cruciate Ligament Reconstruction: A Retrospective Cohort Study, *Joints*, 2018
- Rudolph, K. S., Axe, M. J., & Snyder-Mackler, L. (2000). Dynamic stability after ACL injury: who can hop?. *Knee Surgery, Sports Traumatology, Arthroscopy*, 8(5), 262-269.
- Sachs RA, Daniel DM, Stone ML et al. Patellofemoral problems after anteriorcruciate ligament reconstruction. *Am J Sports Med* 1989; 17(6):760-765.
- Salmon L, Russell V, Musgrove T, Pinczewski L, Refshauge K. Incidence and Risk Factors for Graft Rupture and Contralateral Rupture After Anterior Cruciate Ligament Reconstruction. *Arthrosc J Arthrosc Relat Surg*. 2005;21(8):948-957.
- Saper M. et al ; Outcomes and Return to Sport After Revision Anterior Cruciate Ligament Reconstruction in Adolescent Athletes, *The Orthopaedic Journal of Sports Medicine*, 2018
- Savalli L, Hernandez-Sendin MI, Puig PL, Trouve P. Pain after anterior cruciate ligament reconstruction: detail and treatment. *Annales de réadaptation et de médecine physique* 2004; 47:299-308.
- Senese M. et al ; Rehabilitation following isolated posterior cruciate ligament reconstruction: a literature review of published protocols, *The International Journal of Sports Physical Therap* , 2018
- Shelbourne KD, Gray T. Results of Anterior Cruciate Ligament Reconstruction Based on Meniscus and Articular Cartilage Status at the Time of Surgery. *Am J Sports Med*. 2000;28(4):446-452.
- Shelbourne KD, Trumper RV. Preventing anterior knee pain after anterior cruciate ligament. *Am J Sports Med* 1997; 25:41-7.
- Shelbourne, K. D., & Klotz, C. (2006). What I have learned about the ACL: utilizing a progressive rehabilitation scheme to achieve total knee symmetry after anterior cruciate ligament reconstruction. *Journal of Orthopaedic Science*, 11(3), 318.
- Smith TO, Chester R, Cross J, Hunt N, Clark A, Donell ST. Rehabilitation following firsttime patellar dislocation: a randomised controlled trial of purported vastus medialis obliquus muscle versus general quadriceps strengthening exercises. *Knee*. 2015 Sep;22(4):313-20.
- Sonnery-Cottet B et al. *Arthros Tech* 2014
- Sonnery-Cottet et al. *Am J Sports Med*. 2015
- SOUISSI S. et al ; Improving functional performance and muscle power 4-to-6 months after anterior cruciate ligament reconstruction, *Journal of Sports Science and Medicine*, 2011
- Spindler KP, Wright RW. Anterior Cruciate Ligament Tear. *N Engl J Med*. 2008;359(20):2135-2142.
- Stergiou, N., Ristanis, S., Moraiti, C., & Georgoulis, A. D. (2007). Tibial rotation in anterior cruciate ligament (ACL)-deficient and ACL-reconstructed knees. *Sports medicine*, 37(7), 601-613.
- Stergiou, N., Ristanis, S., Moraiti, C., & Georgoulis, A. D. (2007). Tibial rotation in anterior cruciate ligament (ACL)-deficient and ACL-reconstructed knees. *Sports medicine*, 37(7), 601-613.
- Sugimoto, D., Myer, G. D., Bush, H. M., Klugman, M. F., McKeon, J. M. M., & Hewett, T. E. (2012). Compliance with neuromuscular training and anterior cruciate ligament injury risk reduction in female athletes: a meta-analysis. *Journal of athletic training*, 47(6), 714-723.
- Sugimoto, D., Myer, G. D., Foss, K. D. B., & Hewett, T. E. (2014). Dosage effects of neuromuscular training intervention to reduce anterior cruciate ligament injuries in female athletes: meta-and sub-group analyses. *Sports Medicine*, 44(4), 551-562.
- Terwee CB, Bot SDM, de Boer MR, et al. Quality criteria were proposed for measurement properties of health status questionnaires. *J Clin Epidemiol*. 2007;60(1):34-42.
- Thomeé R, Neeter C, Gustavsson A, et al. Variability in leg muscle power and hop performance after anterior cruciate ligament reconstruction. *Knee Surgery, Sport Traumatol Arthrosc*. 2012;20(6):1143-1151.
- Tripp DA, Stanish WD, Reardon G, Coady C, Sullivan MJL. Comparing Postoperative Pain Experiences of the Adolescent and Adult Athlete After Anterior Cruciate Ligament Surgery. *J Athl Train*. 2003;38(2):154-157.
- Undheim M. et al., Isokinetic muscle strenght and readiness to return to sport following anterior cruciate ligament reconstruction : is there an association ? A systematic review and a protocol recommendation, *British Journal Sports Medecine*, 2015
- Viera EL et al. *Arthroscopy* 2007



DEVIENT



- Vincent et al. KSSTA 2012
- Vora M, Curry E, Chipman A, Matzkin E, Li X. Patellofemoral pain syndrome in female athletes: A review of diagnoses, etiology and treatment options. *Orthop Rev (Pavia)*. 2018 Feb 20;9(4):7281.
- Webster K. et Al ; Return to level I sports after anterior cruciate ligament reconstruction, the orthopaedic journal of sports medicine, 2018
- Webster KE, Feller JA, Lambros C. Development and preliminary validation of a scale to measure the psychological impact of returning to sport following anterior cruciate ligament reconstruction surgery. *Phys Ther Sport*. 2008;9(1):9-15.
- Webster KE, Feller JA, Leigh WB, Richmond AK. Younger Patients Are at Increased Risk for Graft Rupture and Contralateral Injury After Anterior Cruciate Ligament Reconstruction. *Am J Sports Med*. 2014;42(3):641-647.
- Wellsandt E. et Al ; Limb Symmetry Indexes Can Overestimate Knee Function After ACL Injury, *J Orthop Sports Phys Ther*, 2017
- White A. et Al ; Comparison of clinical fatigue protocols to decrease single-leg forward hop performance in healthy individuals, *The International Journal of Sports Physical Therap*, 2018
- Wiggins A. et Al ; Risk of Secondary Injury in Younger Athletes After Anterior Cruciate ligament Reconstruction : A systematic Review and Meta-analysis, *The American Journal of Sports Medicine*, 2016.
- Wiggins AJ, Grandhi RK, Schneider DK, Stanfield D, Webster KE, Myer GD. Risk of Secondary Injury in Younger Athletes After Anterior Cruciate Ligament Reconstruction. *Am J Sports Med*. 2016;44(7):1861-1876.
- Witvrouw E, Callaghan MJ, Stefanik JJ, Noehren B, Bazett-Jones DM, Willson JD, Earl-Boehm JE, Davis IS, Powers CM, McConnell J, Crossley KM. Patellofemoral pain: consensus statement from the 3rd International Patellofemoral Pain Research Retreat held in Vancouver, September 2013. *Br J Sports Med*. 2014 Mar;48(6):411-4.
- Witvrouw E, Crossley K, Davis I, McConnell J, Powers CM. The 3rd International Patellofemoral Research Retreat: an international expert consensus meeting to improve the scientific understanding and clinical management of patellofemoral pain. *Br J Sports Med*. 2014 Mar;48(6):408.
- Witvrouw E, Lysens R, Bellemans J, Cambier D, Vanderstraeten G. Intrinsic risk factors for the development of anterior knee pain in an athletic population. A two-year prospective study. *Am J Sports Med*. 2000 Jul-Aug;28(4):480-9.
- Wright RW, Magnussen RA, Dunn WR, Spindler KP. Ipsilateral Graft and Contralateral ACL Rupture at Five Years or More Following ACL Reconstruction. *J Bone Jt Surg*. 2011;93(12):1159-1165.
- Xergia, S. A., McClelland, J. A., Kvist, J., Vasiliadis, H. S., & Georgoulis, A. D. (2011). The influence of graft choice on isokinetic muscle strength 4–24 months after anterior cruciate ligament reconstruction. *Knee Surgery, Sports Traumatology, Arthroscopy*, 19(5), 768-780.
- Xergia, S. A., McClelland, J. A., Sugimoto, D., Myer, G. D., McKeon, J. M., & Hewett, T. E. (2012). Evaluation of the effectiveness of neuromuscular training to reduce anterior cruciate ligament injury in female athletes: a critical review of relative risk reduction and numbers-needed-to-treat analyses. *Br J Sports Med*, 46(14), 979-988.
- Xergia, S. A., Pappas, E., & Georgoulis, A. D. (2015). Association of the single-limb hop test with isokinetic, kinematic, and kinetic asymmetries in patients after anterior cruciate ligament reconstruction. *Sports Health*, 7(3), 217-223.
- Xergia, S. A., Pappas, E., Zampeli, F., Georgiou, S., & Georgoulis, A. D. (2013). Asymmetries in functional hop tests, lower extremity kinematics, and isokinetic strength persist 6 to 9 months following anterior cruciate ligament reconstruction. *Journal of Orthopaedic & Sports Physical Therapy*, 43(3), 154-162.
- Yosmaoglu HB, Kaya D, Guney H, Nyland J, Baltaci G, Yuksel I, Doral MN. Is there a relationship between tracking ability, joint position sense, and functional level in patellofemoral pain syndrome? *Knee Surg Sports Traumatol Arthrosc*. 2013 Nov;21(11):2564-71.
- Zampeli, F., Ntoulia, A., Giotis, D., Stavros, R., Mitsionis, G., Pappas, E., & Georgoulis, A. D. (2014). The PCL index is correlated with the control of rotational kinematics that is achieved after anatomic anterior cruciate ligament reconstruction. *The American journal of sports medicine*, 42(3), 665-674.
- Zampeli, F., Ntoulia, A., Giotis, D., Tsiaras, V. A., Argyropoulou, M., Pappas, E., & Georgoulis, A. D. (2012). Correlation between anterior cruciate ligament graft obliquity and tibial rotation during dynamic pivoting activities in patients with anatomic anterior cruciate ligament



**MAISON  
DES  
KINES**  
INK FORMATION

Institut National de la Kinésithérapie  
[www.maisondeskines.com](http://www.maisondeskines.com)

> 3, rue Lespagnol - 75020 Paris  
tél. : 01 44 83 46 71

[secretariat@ink-formation.com](mailto:secretariat@ink-formation.com)

N° de déclaration d'activité : 11 75 116 30 75



reconstruction: an in vivo examination. Arthroscopy: The Journal of Arthroscopic & Related Surgery, 28(2), 234-246.

- Zampeli, F., Ntoulia, A., Giotis, D., Tsiaras, V. A., Argyropoulou, M., Pappas, E., & Georgoulis, A. D. (2012). Correlation between anterior cruciate ligament graft obliquity and tibial rotation during dynamic pivoting activities in patients with anatomic anterior cruciate ligament reconstruction: an in vivo examination. Arthroscopy: The Journal of Arthroscopic & Related Surgery, 28(2), 234-246.
- Zazulak BT, Hewett TE, Reeves NP, Goldberg B, Cholewicki J. Deficits in Neuromuscular Control of the Trunk Predict Knee Injury Risk. Am J Sports Med. 2007;35(7):1123-1130.
- Zazulak, B. T., Hewett, T. E., Reeves, N. P., Goldberg, B., & Cholewicki, J. (2007). The effects of core proprioception on knee injury: a prospective biomechanical-epidemiological study. The American journal of sports medicine, 35(3), 368-373.
- Zazulak, B. T., Hewett, T. E., Reeves, N. P., Goldberg, B., & Cholewicki, J. (2007). Deficits in neuromuscular control of the trunk predict knee injury risk: prospective biomechanical-epidemiologic study. The American journal of sports medicine, 35(7), 1123-1130.
- Zazulak, B. T., Paterno, M., Myer, G. D., Romani, W. A., & Hewett, T. E. (2006). The effects of the menstrual cycle on anterior knee laxity. Sports medicine, 36(10), 847-862.
- Zebis, M. K., Andersen, L. L., Bencke, J., Kjær, M., & Aagaard, P. (2009). Identification of athletes at future risk of anterior cruciate ligament ruptures by neuromuscular screening. The American journal of sports medicine, 37(10), 1967-1973.
- Zebis, M. K., Bencke, J., Andersen, L. L., Døssing, S., Alkjær, T., Magnusson, S. P., ... & Aagaard, P. (2008). The effects of neuromuscular training on knee joint motor control during sidcutting in female elite soccer and handball players. Clinical Journal of Sport Medicine, 18(4), 329-337.



DEVIENT

